

Appln. No.: 10/700,275
Amdt. dated 11/17/05

REMARKS

In the Office Action of May 17, 2005, Claim 43 was objected to. The Examiner asserted that "Claim 43 reads only on fig. 5, the only signals that can be considered as the 'transmitted signals' are signals 42A-42D, i.e. input of the phase detector circuits." Applicant respectfully submits that claim 43 does not read "only on fig. 5." The "transmitted signals" of claim 5 are described, for example, in Figures 1 and 2. FIG. 1 shows a plurality of twisted wire pairs 112a-112d. A signal is transmitted on each of the twisted wire pairs and received at the respective line interface circuits 106. In FIG. 2, line interface 210 corresponds to the line interface circuits 106 of FIG. 1. As explained at page 9, line 25 – page 10, line 1 of the specification, "For ease of illustration and description, FIG. 2 shows only one of the four 250 Mb/s constituent transceivers which are operating simultaneously (termed herein 4-D operation). However, since the operation of the four constituent transceivers are necessarily interrelated, certain blocks and signal lines in the exemplary embodiment of FIG. 2 perform four dimensional operations and carry four-dimensional (4-D) signals, respectively." Thus, although FIG. 2 only shows one line interface 210 communicating with one twisted wire pair, it is clearly explained that the transceiver of the present invention receives transmitted signals over four twisted wire pairs. The received transmitted signals then propagate through the sampling clock domain and the receive clock domain shown in FIG. 2. That is, the plurality of transmitted signals propagates through, for example, high-pass filter 212, PGA 214, A/D converter 216, A/D FIFO 218, pair-swap MUX 224, demodulator 226, and so on. The received transmitted signals are not shown explicitly in FIG. 5. FIG. 5 shows the timing recovery system 222 according to an illustrative embodiment of the invention. But the four phase detectors 502, 512, 522, 532, the four phase control signals (output from the NCOs 508, 518, 528, 538), and so on are associated with four signals received over the four twisted wire pairs, as the specification makes perfectly clear. Therefore, claim 43 is supported by the specification. There is no requirement that all of the elements of a claim be shown in a single drawing.

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Claims 44-54 were also objected to for various informalities. Claims 44-48 and 50-54 are amended herewith to overcome these objections. Claim 49 is cancelled herewith. Claims 47-54 were also rejected under 35 U.S.C. 112, second paragraph. Claims 47, 50 and 51 are amended herewith to depend on claim 43 and claims 53 and 54 are amended herewith to depend on claim 52, thus overcoming the 112 rejection. Claim 52 is amended herewith to provide antecedent basis for "the plurality of transmitted signals," thus overcoming the 112 rejection of that claim.

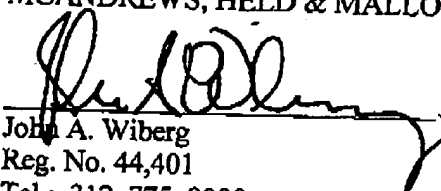
In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and allowance of claims 43-48 and 50-54.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,

MCANDREWS, HELD & MALLOY, LTD.


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